## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 26 May 2005 (26.05.2005)

(10) International Publication Number WO 2005/048293 A3

(51) International Patent Classification: HOIJ 61/06 (2006.01) HOIJ 61109 (2006.01) HOIJ 61/26 (2006.01)

HOIJ 9/02 (2006.01)

HOIJ 7/18 (2006.01)

(21) International Application Number:

PCT/IT2004/000614

(22) International Filing Date:

9 November 2004 (09.1 1.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: MI2003A002208

14 November 2003 (14.11.2003)

- (71) Applicant (for all designated States except US): SAES GETTERS S.P.A. [IT/IT]; Viale Italia, 77, 1-20020 Lainate MI (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CORAZZA, Alessio [IT/IT]; Via Rienza, 72, 1-22100 Como (IT). MASSARO, Vincenzo [IT/IT]; Localita Cascina Faustina 5, 1-20080 Albairate MI (IT).

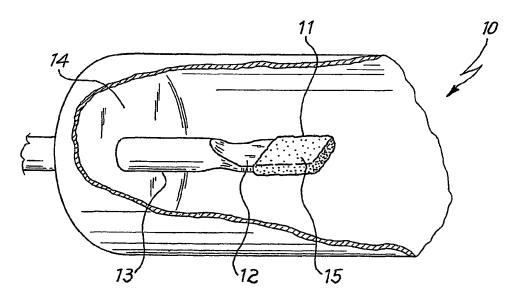
- (74) Agents: ADORNO, Silvano et al.; Societa Italiana Brevetti S.p.A., Via Carducci, 8, 1-20123 Milano (IT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, 1S, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of

[Continued on next page]

(54) Title: CATHODE WITH INTEGRATED GETTER AND LOW WORK FUNCTION FOR COLD CATHODE METHODS FOR MANUFACTURING SUCH A CATHODE



(57) Abstract: There are disclosed several embodiments of a cathode (11; 20; 30) for cold cathode lamps having the surface at least partially coated with a layer of a getter material (15; 26; 31), which allows to achieve a reduction of the value of the work function of the cathode (11,20,30) and therefore a reduction of the power consumption of the lamp.



(88) Date of publication of the international search report: 16 March 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.